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Sustainable Housing- A Literature Review

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ABSTRACT: Sustainable housing integrates environmental, social, cultural, and economic dimensions. Strategies include optimizing resource efficiency, minimizing waste, utilizing renewable energy, and enhancing affordability and livability. Effective policies emphasize community involvement, equitable distribution of resources, and innovative financial mechanisms. The frameworks proposed advocate balancing present needs with future capacities while fostering inclusivity and cultural preservation. These principles align with global goals like aiming for improved living standards and ecological harmony.

KEY WORDS: Sustainability, Housing, Environmental, Affordability

I. INTRODUCTION

Sustainable housing is a vital issue that requires a balanced approach to environmental, social, and economic needs. This collection of articles explores the challenges and opportunities in sustainable housing, offering insights and solutions for creating more resilient, environmentally friendly, and equitable communities that support the well-being of both people and the planet.

Through a comprehensive analysis of global housing policies, innovative design strategies, and community engagement initiatives, these articles provide a roadmap for policymakers, and stakeholders seeking to create sustainable, thriving communities for generations to come.

II. LITERATURE REVIEW

Charles L. Choguill's(2007) "The Search for Policies to Support Sustainable Housing" critically examines global housing policies and their limitations over the past five decades, particularly in addressing the needs of impoverished populations. Choguill highlights the ongoing inadequacy of housing policies despite high-profile initiatives like the Millennium Development Goals, which aim to improve the lives of millions of slum dwellers. The article defines sustainability as meeting present needs without compromising future generations and applies this principle to housing policies, focusing on poverty reduction, slum eradication, environmental preservation, and access to financing. It also reflects on the evolution of housing policy through phases like public housing, self-help initiatives, and the creation of enabling environments, concluding that none have adequately solved the issue.

They offers a forward-looking perspective, suggesting five critical policy areas for achieving sustainable housing: community involvement, affordable building materials, flexible standards, innovative housing finance, and land availability. Choguill stresses that sustainable housing cannot be viewed in isolation but as part of broader urban and economic development. The article underscores the interconnected nature of housing, ultimately arguing that while sustainability is necessary for success, it is not sufficient unless integrated with efforts to improve incomes, employment, and overall living conditions. This comprehensive critique is an insightful resource for policymakers and researchers focused on sustainable urban development.

Siti Hamidah Abdul Hamid , Shariffah Zatil Hidayah Syed Jamaludin , Siti Akhtar Mahayauddin(2018). explores the critical success factors (CSFs) for achieving sustainable and affordable housing in Malaysia. By utilizing a multi-eco-system framework, the study addresses economic, environmental, and social dimensions to tackle the challenges faced by the middle-income group in accessing affordable housing. The authors highlight the importance of government subsidies, efficient management to reduce life-cycle costs, the use of sustainable materials, and stakeholder participation in achieving housing affordability and sustainability. The paper effectively ties its findings to Malaysia's

Eleventh National Plan (2016–2020), making it highly relevant for policymakers. The discussion could also be enhanced by offering more detailed recommendations for fostering public-private partnerships and improving stakeholder collaboration. Despite these limitations, the article is a valuable contribution to housing research, offering a structured approach to addressing the interconnected issues of sustainability and affordability.

Chima Ichendu and Alexander Chinago Budnukaeku (2021), published in the Journal of City and Development (2021, Vol. 3, No. 2), explores the integration of sustainability in housing development. The authors emphasize the importance of a comprehensive framework encompassing environmental, economic, social, and cultural sustainability. They highlight challenges such as land accessibility, affordability, and socio-economic disparities, while advocating for policies that prioritize efficient resource use and sustainable infrastructure. The article underscores the role of sustainable housing in fostering livability, equity, and environmental preservation for current and future generations.

Abhinav Tripathi, Tabhish Ahmed Abdullah, and Ananya Tripathi(2022), published in the International Research Journal of Modernization in Engineering, Technology, and Science (July 2022), explores the integration of sustainability principles into housing development. It highlights the importance of resource efficiency, technological advancements, and environmentally friendly practices, such as renewable energy use, rainwater harvesting, urban farming, and decentralized wastewater systems. The article emphasizes the role of sustainable housing in addressing environmental, social, and economic challenges while ensuring healthier and more inclusive communities. By presenting practical solutions and strategies, it offers valuable insights for urban planners, architects, and policymakers aiming to balance development with environmental preservation.

Joseph Laquatra(2024), published in the International Journal on Engineering Technologies and Informatics (Volume 5, Issue 1, 2024), provides a concise overview of critical aspects of sustainable housing, focusing on waste management, energy efficiency, and green building practices. It highlights the challenges posed by construction waste, barriers to energy-efficient design, and the rebound effect while emphasizing the need for regulatory measures and consumer education to drive sustainability in housing. Backed by research and references, the article is both timely and relevant, addressing global concerns like resource optimization and carbon footprint reduction. However, its scope as a short communication limits detailed exploration of regional contexts or specific case studies. Despite this, it serves as an insightful introduction for policymakers, researchers, and industry practitioners interested in sustainable housing solutions.

III. CONCLUSION

Sustainable housing integrates environmental, economic, social, and cultural dimensions to address challenges like resource efficiency, affordability, and equity. This review highlights the importance of policy frameworks, innovative designs, stakeholder collaboration, and renewable energy use. While advancements have been made, challenges such as affordability and socio-economic disparities persist. Holistic approaches that balance present needs with long-term sustainability are essential. Technological advancements and community involvement can drive solutions tailored to regional contexts. By prioritizing inclusivity, ecological balance, and resource efficiency, sustainable housing can create resilient communities, ensuring better living standards and environmental preservation for current and future generations.

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